In re Application of:
Gary S. Firestein et al.
Application No.: 10/716,647
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AMENDMENTS TO THE CLAIMS

Please amend claims 32, 33, 39, 41, 43, 47, 50, 51, and 53, as set forth below.

Please cancel claims 1-31, 38, 46, and 52.

Please withdraw claims 40, 42, 44, 45, 48, 49, and 54, without prejudice or disclaimer.

The current listing of claims replaces all prior listings.

1 to 31. (Canceled)

32. (Currently amended) A composition comprising a therapeutically effective amount of a nucleic acid with a sequence encoding a polypeptide that promotes apoptosis in mammalian cells.

wherein the [[said]] composition is formulated for administration into an arthritic or inflamed joint in a mammalian subject and for transfection of comprises transfected synoviocytes within said joint containing a DNA vector encoding wild-type p53, wherein the [[said]] synoviocytes express endogenous mutant p53 protein, and wherein the composition is within said amount is effective in reducing signs of arthritis or inflammation upon administration into a joint of a mammalian subject.

- (Currently amended) The composition of claim 32, which induces wherein apoptosis is induced in synoviocytes present in a joint to which it is administered.
- 34. (Previously presented) The composition of claim 32, wherein the nucleic acid is an expression vector in which said polypeptide encoding sequence is operably linked to a promoter that promotes expression of the encoded polypeptide in fibroblast-like synoviocytes.
- (Previously presented) The composition of claim 32, where the nucleic acid is a viral vector.

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36. (Previously presented) The composition of claim 35, wherein the viral vector is an

adenovirus vector.

37. (Previously presented) The composition of claim 35, wherein the viral vector is

replication deficient.

38. (Canceled)

39. (Currently amended) The composition of claim 36[[2]], wherein the <u>viral vector does</u>

not replicate in cells expressing wild-type p53 polypeptide is selected from p53,

p21Waf, ras, proteins in the Bax family, and proteins in the ICE family.

40. (Withdrawn) The composition of claim 32, wherein the polypeptide is a

peptidomimetic or binding agent of p53, p21Waf, ras, a protein in the Bax family, or a

protein in the ICE family.

41. (Currently amended) The composition of claim 32, wherein the composition is

contained within formulated for administration into a joint of a subject having

rheumatoid arthritis.

42. (Withdrawn) The composition of claim 32, wherein the composition is formulated for

administration into a joint of a subject having ankylosing spondylitis, psoriatic arthritis,

or inflammatory bowel disease.

43. (Currently amended) The composition of claim 32, wherein the subject is-formulated

for administration to a human subject.

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44. (Withdrawn) A method for promoting apoptosis in synoviocytes in an inflamed joint in a mammal, comprising administering a composition according to claim 32 into said joint.

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- 45. (Withdrawn) A method for treating rheumatoid arthritis in a mammalian subject, comprising administering to into an arthritis joint in said subject a composition according to claim 32.
- 46. (Canceled)
- 47. (Currently amended) The composition of claim 35, wherein the viral vector is an adeno-associated virus (AAV) vector or adenovirus vector.
- 48. (Withdrawn) A composition comprising:
 - a) a plurality of a nucleic acid vector for expressing a polypeptide that promotes apoptosis in mammalian cells; and
 - b) a plurality of fibroblast-like synoviocytes:

wherein the amount of said vector in the composition is sufficient to reduce the number of said fibroblast-like synoviocytes in the composition.

- The composition of claim 47, further comprising a plurality of 49. (Withdrawn) macrophage-like synoviocytes.
- 50. (Currently amended) The composition of claim 47, wherein the synoviocytes are [[said]] fibroblast-like synoviocytes [[are]] present in synovial tissue.
- 51. (Currently amended) The composition of claim 47, wherein said vector is an adenovirus or AAV vector.

52. (Canceled)

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- 53. (Currently amended) The composition of claim 47, wherein the adenovirus vector comprises a mutant p19 gene the polypeptide is a protein selected from the group consisting of p53, p21Waf, ras, proteins of the Bax family, and proteins of the ICE family, or is a peptidomimetic or binding agent of any protein thereof in said group.
- 54. (Withdrawn) A host cell transfected with a nucleic acid vector for expressing a polypeptide that promotes apoptosis in said cell, wherein the cell is a fibroblast-like synoviocyte.